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#### Comparative analysis of students training needs regarding Internet and its effects

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**Abstract:** In this article we will try to realize a comparative study in order to find out if the internet has a positive or a negative role for undergraduate's university students.

**The purpose** of this study is to identify the perception of undergraduate university students regarding the effects of the internet for their scientific activities and their training needs.

The study is based on data obtained from the application of a sample survey which studies the opinion of undergraduate students regarding the role of internet in students education.

The sample size was 496 students (students from „Alexandru Ioan Cuza” University of Iasi and from „Stefan cel Mare” University of Suceava.

**Keywords:** higher education; internet role; attitude; academic performance, students' training needs.

#### I. Review of the literature

The Internet was created by the US Defense Department for research purpose. In time, it becomes the most important tool for the worldwide organizations, including universities.

Many universities try to ensure full access on internet to its students, to help them to progress, to make their scientifically activities much more easily.

The specialty literature shows that Internet has the next roles in education: 1. to facilitate online communication, 2. to be a warehouse of information, 3. to allow online research, 4. to facilitate online learning, 5. to conduct to innovation in education, 6. to improve interest in learning, etc.

A lot of studies point out the importance of Internet in education. Li et al. (2003) highlight: "First, web-based instruction presents information in a non-linear style, allowing students to explore new information via browsing and cross-referencing activities. Second, web-based teaching supports active learning processes emphasized by constructivist theory. Third, web-based education is enhanced understanding through improved visualization and finally, the convenience, it could be used any time, at any place". A review of studies conducted by the CEO Forum (2001) emphasizes: "technology can have the greatest impact when integrated into the curriculum to achieve clear, measurable educational objectives."

But there are studies aim to review the literature on the potential for internet abuse and addiction among undergraduate university students, but not only. Scherer (1997, p. 367), "it results in impaired functioning such as compromised grades or the failure to fulfill responsibilities" DeBell and Chapman (2006) in a research conducted by them find out the negative impact of internet among students. The potential negative outcomes identified include: repetitive motion injuries; social isolation; interference with appropriate eating habits nutrition (Van den Bulck and Eggermont, 2006); decreased physical activity leading to obesity.

Since the internet is about to replace the libraries and the bookstores, for us remain the question: is the internet a miracle of the 21 century, with an important role in education, or is a tool which will leads in time to decline of the society, especially of the undergraduates students?

In conclusion, we will do a study to find out if the opinion of undergraduate's university students regarding internet and its effect will be positive or negative.

## **II. Study concerning undergraduate students attitudes about internet**

### **2.1. The main purpose and objectives of the study**

**The purpose** of this study is to identify the perception / opinion of undergraduate university students regarding the effects of the internet for their scientific activities and their training needs.

**The objectives** of the studies:

1. to identify the students opinion regarding internet;
2. to find out the purpose of using the internet;
3. to discover if the internet improves or not their scientific activity.

### **2.2. The hypothesis of the study**

The hypotheses of the study are:

1. The undergraduate students use intensively the internet because is the easiest way to procure the information need it.
2. Many students will take into account the advantages of the internet, neglecting the disadvantages.
3. All the students have used, use and will use internet as the most important tool for their scientific activity and not only.

### **2.3. Research methodology**

The study is based on data obtained from the application of a sample survey which studies the opinion of undergraduate students regarding the role of internet in students education. The sample survey was applied to a non-probabilistic sample. Students were randomly selected from two universities: "Alexandru Ioan Cuza" University of Iasi and "Stefan cel Mare" University of Suceava.

The investigative technique used was the auto-questionnaire survey consisting in 8 question administered in group.

### **2.4. The sample structure**

The sample size was 496 students (students from „Alexandru Ioan Cuza” University of Iasi and from „Stefan cel Mare” University of Suceava. Each student completed one non-standardized questionnaire. We classify the whole sample after criterion: “university where the students study” providing the following sub samples:

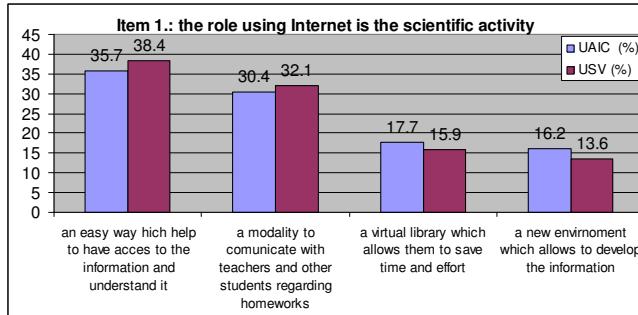
- sub sample of students studying at "Alexandru Ioan Cuza" University of Iasi composed of 287 undergraduates students;
- sub sample of students studying at "Stefan cel Mare" University of Suceava composed of 209 undergraduate students.

### **2.5. Data analysis techniques**

The Statistical Package for Social Science Program (SPSS) was used to summarize and run correlation on data obtained from the survey. Frequency distribution used to mention demographics of students. Correlation technique was utilized to discuss relationship between undergraduate university students training needs and internet usage.

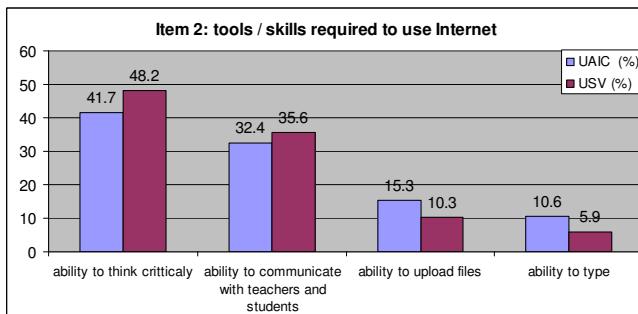
### **2.6. Findings / The results obtained after applying the opinion questionnaire**

Figure 1: the structure of answers at question Q1



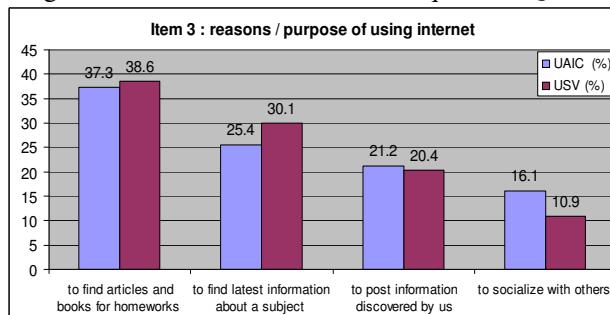
As we can see, over 35% of undergraduate students consider internet an easy way to access information and over 30% of students consider internet a way of communication. There are no significant differences between students from “Alexandru Ioan Cuza” University of Iasi and students from “Stefan cel Mare” University of Suceava.

Figure 2: the structure of answers at question Q2



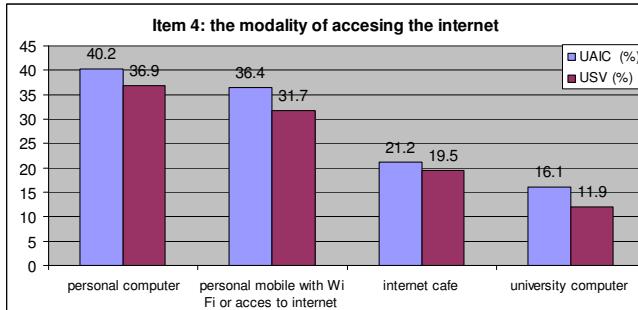
It is interesting to discover that undergraduate students consider ability to think critically the most important skill required for using internet (over 41% of students) and the next one is the ability to communicate (over 32% of students).

Figure 3: the structure of answers at question Q3



The most important reason why undergraduate students want to use internet is that they use it to find articles and books (over 37%) and another reason is that they want to find the latest information about a subject (over 25% of respondents).

Figure 4: the structure of answers at question Q5



Over 36.9% of undergraduate students have a personal computer and over 36.4 of them have a mobile phone, the both instruments are used to access internet for their homework.

#### Item 5: internet improve the academic performance

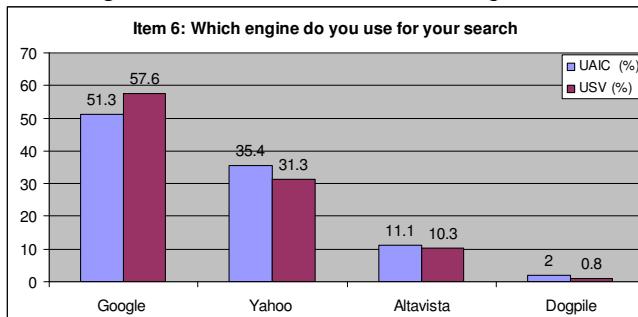
Yes (83,7%)		„Al. I. Cuza” University of Iasi (%)	„Stefan cel Mare” University of Suceava (%)
1.	we are up to date to the latest news and development from a specific field	35.4	36.9
2.	the quality of information is in a continuous increasing	32.6	30.7
3.	they obtain information at any time of day or night	24.3	8.9
4.	we can ask additional information from other users	7.7	23.5

More than 83% consider that internet has a huge role for their academic performance because they can find out the latest news regarding different topics (over 35.4%) and because the information expires very quickly (over 30.7%).

No (16.7%)		„Al. I. Cuza” University of Iasi (%)	„Stefan cel Mare” University of Suceava (%)
1.	Internet is full of viruses which destroyed the computer	35.8	32.7
2.	A lots of information are innacurate or outdates	33.7	37.3
3.	Information are already structured and interpreted	23.4	19.4
4.	Many students can't have acces to internet	7.1	10.6

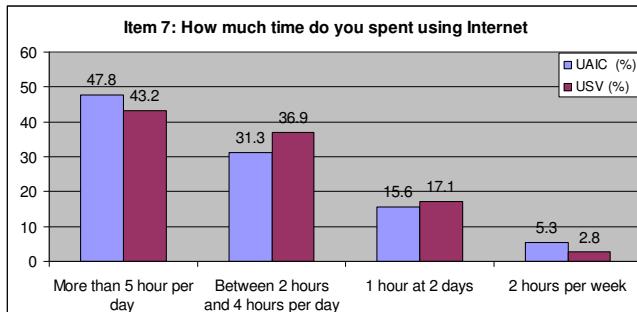
But there are students (over 16.7%) which consider that internet not improve the academic performance, mostly because it is full of viruses (32.7%) and a lot of information is inaccurate or outdates (33.7%).

Figure 6: the structure of answers at question Q6



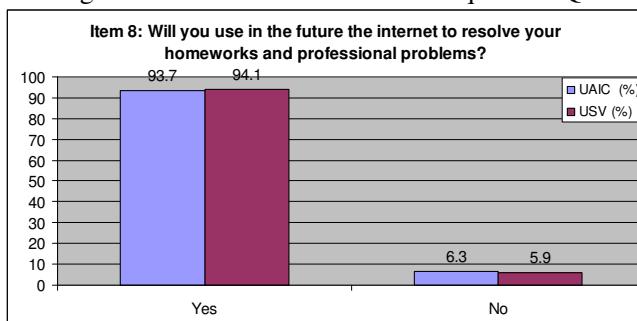
As we are expected, over 51 % of university students use google as an engine to do search, and over 31% use yahoo.

Figure 7: the structure of answers at question Q7



It is interesting to see that university students spend a lot of time using computer and internet (over 43 % spend more than 5 hours par day and over 31 % spend between 2 and 4 hours per day)

Figure 8: the structure of answers at question Q8



As a conclusion, more than 93% of university students will use internet to solve their professional problems. This thing indicates a high level regarding internet and its power.

## 2.7. Validation of the hypothesis

The first hypothesis „*The undergraduate students use intensively the internet because is the easiest way to procure the information they need it*” was **validated** by the answers offered by the undergraduates students from both university centers to the item 1 (more than 35 % consider this).

The students consider that internet help them to have access to the information, to communicate with others, to find the latest information about a subject, to socialize.

The second hypothesis „*Many students will take into account the advantages of the internet, neglecting the disadvantages*” was **validated** by the answers offered by undergraduate’s students from both university centers to the item 5. (83.7% of students consider that internet improve the academic performance). The reasons offered by students are: they are up to date to the latest news and development from a specific field, the quality of information is in a continuous increasing, they obtain information at any time of day or night, etc.

The third hypothesis „*All the students have used, use and will use internet as the most important tool for their scientific activity and not only*” was **validated** by the big percent of undergraduates students from both university centers (93.7%) who will use in the future the internet and the big number of hours spent using the internet (over 43% spent more than 5 hours per day using internet and over 31% spent between 2 and 4 hours per day using internet).

## 2.8. The main limits of the study

1. sample consists only of undergraduates university students from “Alexandru Ioan Cuza” University of Iasi and “Stefan cel Mare” University of Suceava , so these results can not be extended to the entire population of Romanian undergraduates university students;
2. there will be no pre-testing the subjects, which means that we can not obtain the accuracy of the results;
3. there is no control group.

### **III. Conclusions and suggestions**

As we can see, there are no significant differences regarding the role of internet between undergraduates university students from "Alexandru Ioan Cuza" University of Iasi and undergraduates university students from "Stefan cel Mare" University of Suceava.

The entire sample emphasis the positive role of Internet for their academic and social training needs. They consider that the internet usage will conduct to development of information, to improvement of scientific performance, to a better communication and to saving time and money. But they neglet the negative aspects of internet usage, such as: internet is full of viruses which destroyed the computer; a lot of information are innacurate or outdated; iformation are already structured and interpreted, many students can't have acces to internet.

In this context, we will try to make some sugesstions:

- the universities should specify exactly why they encouraging the internet usage.
- the universities shoud organize online courses, but, in the same time, to encourage critical thinking, creativity, originality, etc;
- all universities should take into account the undergraduates students training needs and to not give tasks which involves spending a lots of time on internet;
- course materials should be posted on Web to allow students to use its when they need;
- the universities should facilitate communication between teachers and students using internet;
- the universities should use internet as the easiest and faster way to communicate and to cooperate with other universities.

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